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10/595,647

08/10/2006

Achim Menne

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EXAMINER

YOUNG, EDWIN

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,647	<b>Applicant(s)</b> MENNE, ACHIM	
	<b>Examiner</b> EDWIN A. YOUNG	<b>Art Unit</b> 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/2/2006 and 12/9/2008</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This is the first action on the merits for application 10/595,647. The preliminary amendment filed 5/02/2006 cancelled claims 1-17 and presented new claims 18-37. Claims 18-37 are currently pending in this application.

#### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP04/12700, filed on 11/10/2004.

#### ***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 5/02/2006 and 12/09/2008 have been considered by the examiner.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the integrated mechanical components moved in the radial direction of claim 18 and the mechanical components introduced into a gap between the individual impellers of claim 34 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

In response to the letter submitted by applicant on 7/24/2006, the title of the application has been corrected to - -Starting Unit- -.

The disclosure is objected to because of the following informalities: the specification contains numerous references to specific claims (see paragraph [0001]), which must be removed. Claim numbering and scope are subject to change during prosecution and could therefore render the references in the specification invalid.

Appropriate correction is required.

### ***Claim Objections***

Claim 18 is objected to because of the following informalities:

- Line 15, "system of switchable clutch" should be changed to - -system of the switchable clutch- -.
- Line 21, "which act least" should be changed to - -which act at least- -.

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- Line 24, "in to" should be changed to - -into- -.

Claim 27 is objected to because of the following informalities:

- Line 2, "between clutch" should be changed to - -between the clutch- -.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding the limitation beginning in claim 18, line 23, "the integrated mechanical components...can be moved in the...radial direction", the specification does not contain an adequate disclosure to allow one skilled in the art to implement such features.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 18

- Line 9, "means -- a first clutch element and a second clutch element - which are" is unclear. It is suggested that the limitation be changed to - - means; the at least two clutch elements including a first clutch element and a second clutch element, which are- -.
- Claim 18 recites the limitation "the walls" in lines 24-25. There is insufficient antecedent basis for this limitation in the claim. It is unclear what element(s) the walls correspond to.
- Lines 23-26, "the integrated mechanical components...can be moved in the...radial direction" is indefinite since the disclosure does not contain an adequate description to allow one skilled in the art to implement such features.
- Claim 18 recites the limitation "the differential pressure" in line 30. There is insufficient antecedent basis for this limitation in the claim. It is unclear what the differential pressure is.
- Claim 18 recites the limitations "the pressure medium diverted" in lines 30-31, "the pressure" in line 32 and "the area" in line 32. There is insufficient antecedent basis for these limitations in the claim.

Claim 19

- Claim 19 recites the limitations "the inner diameter" and "the outer diameter" in line 3. There is insufficient antecedent basis for these

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limitations in the claim. Claim 19 should be changed to - -an inner diameter- - and - -an outer diameter- -.

Claim 20

- Line 3, "two impellers - primary impeller or secondary impeller" appears redundant. Line 3 should be changed to - -primary impeller or secondary impeller- -.

Claim 21

- Claim 21 recites the limitation "actuation systems of the individual integrated mechanical components are" in line 2. There is insufficient antecedent basis for this limitation in the claim. Line 2 should be changed to - -actuation system of the individual integrated mechanical components is- -.

Claim 22

- Line 3, "at least partially formed by it" is unclear as to what "it" is referring to.

Claim 24

- Claim 24 recites the limitation "the wall" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- Regarding claim 24, the phrase "particularly" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Furthermore, there is no antecedent basis for the limitation, "the piston".

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Claim 28

- Line 3, “a line connected to that” is unclear as to what “that” is referring to.

Claim 31

- Claim 31 recites the limitation "the wall" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- Line 2, “an impeller” appears to be a double inclusion of limitations found in claim 18. Furthermore, it is unclear if the primary or secondary impeller is being reference.
- Claim 31 recites the limitation "the flow circulation" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 34

- Claim 34 recites the limitation "the gap" in line 2. There is insufficient antecedent basis for this limitation in the claim. Line 2 should be changed to - -a gap- -.

Claim 35

- Line 3, “two impellers - primary impeller or secondary impeller” appears redundant. Line 3 should be changed to - -primary impeller or secondary impeller- -.

Claim 36

- Claim 36 recites the limitation "actuation systems of the individual integrated mechanical components are" in line 2. There is insufficient antecedent basis for this limitation in the claim. Line 2 should be changed



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to - -actuation system of the individual integrated mechanical components  
is- -.

Claim 37

- Claim 37 recites the limitation "actuation systems of the individual integrated mechanical components are" in line 2. There is insufficient antecedent basis for this limitation in the claim. Line 2 should be changed to - -actuation system of the individual integrated mechanical components is- -.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-37 are rejected under 35 U.S.C. 102(b) as being anticipated by YOKOYAMA et al. (US 4,128,999).

Regarding claim 18 as best understood, YOKOYAMA et al. discloses a starting unit (see Figure) with an input (12) which can be connected to a drive and an output (14) which can be connected to a load; with a starting element (10) in the form of a hydrodynamic component, comprising a primary impeller (16) and a secondary impeller (18) which together form a working compartment which can be filled with working fluid; with a switchable clutch (22) comprising at least two clutch elements which can be brought into a working frictional connection with one another directly or indirectly

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through additional transmission means -- a first clutch element (74) and a second clutch element (76) - which are connected with the input and the output at least indirectly in a rotationally fixed manner and which are actuated by means of a clutch actuation system (78); with a housing (36) enclosing at least one impeller in the axial direction forming at least one working fluid guide channel or chamber (80) and connected to the primary impeller in a static or rotationally fixed manner; the clutch actuation system of switchable clutch being at least indirectly connected to the working fluid guide channel or chamber as a pressure source, whereby the working fluid guide channel or chamber can be connected at least indirectly to a working fluid inlet channel (84); characterized by the following features: with means (24) to influence the transmission ratio of the hydrodynamic component; the means comprising pressure medium actuated integrated mechanical components (20, 88, 94) which act least indirectly on the working circulation in the working compartment and which have an actuation system (98); whereby the integrated mechanical components are implemented in the form of separate elements which can be introduced in to the working compartment or in the form of a partial region of the walls guiding the flow in the working compartment which can be moved in the axial direction or radial direction; the pressure medium actuated integrated mechanical components being impinged upon by pressure medium from the inlet channel or the first working fluid guide channel or chamber, whereby the position of the pressure medium actuated integrated mechanical components relative to the working compartment is a function of the differential pressure between the pressure medium

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diverted from the inlet channel or the first working fluid guide channel or chamber and the pressure in the interior of the housing in the area of the actuation system.

Regarding claim 19 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components (20, 88, 92, 94) take effect on an arbitrary diameter between the inner diameter and the outer diameter of the working compartment.

Regarding claim 20 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components (20, 88, 92, 94) are guided either along the housing and/or along one of the two impellers -primary impeller or secondary impeller.

Regarding claim 21 as best understood, YOKOYAMA et al. discloses the actuation systems (98) of the individual integrated mechanical components are fastened to the housing connected to the primary impeller in a static or rotationally fixed manner.

Regarding claim 22 as best understood, YOKOYAMA et al. discloses the actuation system (98) of the individual integrated mechanical components are located at the clutch actuation system (78) of the switchable coupling and are at least partially formed by it.

Regarding claim 23 as best understood, YOKOYAMA et al. discloses the actuation system (98) comprises a cylinder-piston unit, whereby the piston (88) is connected to the integrated mechanical components.

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Regarding claim 24 as best understood, YOKOYAMA et al. discloses the cylinder (88) is formed by the wall of the housing or a separate integrated part in the housing or in the wall, particularly in the piston of clutch actuation system of the switchable clutch.

Regarding claim 25 as best understood, YOKOYAMA et al. discloses the pressure medium is guided to the actuation system (98) through at least one connecting line (86) at least indirectly connected to the working fluid inlet channel (84) and/or the working fluid guide channel or chamber.

Regarding claim 26 as best understood, YOKOYAMA et al. discloses the connecting line (86) is led inside the housing.

Regarding claim 27 as best understood, YOKOYAMA et al. discloses the connecting line (86) is connected through an intermediate chamber (junction to the right of numeral 106) between the clutch actuation system (78) of switchable clutch to the actuation system (98) of the integrated mechanical components.

Regarding claim 28 as best understood, YOKOYAMA et al. discloses the connecting line (86) is connected with a line extending in the clutch actuation system (78) of the switchable clutch or with a line connected to that.

Regarding claim 29 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components comprise a ring slide which can be moved in the axial direction and which is formed from at least a partially ring-shaped element extending in the circumferential direction.

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Regarding claim 30 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components are formed from a bolt-shaped element which can be moved in the axial direction.

Regarding claim 31 as best understood, YOKOYAMA et al. discloses the integrated mechanical components are formed by a partial region of the wall of an impeller which is used to guide the flow circulation.

Regarding claim 32 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components are located on the primary impeller.

Regarding claim 33 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components are located on the secondary impeller.

Regarding claim 34 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components can be introduced into the gap between the individual impellers.

Regarding claim 35 as best understood, YOKOYAMA et al. discloses the pressure medium actuated integrated mechanical components are guided either along the housing and/or along one of the two impellers - primary impeller or secondary impeller.

Regarding claim 36 as best understood, YOKOYAMA et al. discloses the actuation systems of the individual integrated mechanical components are fastened to the housing connected to the primary impeller in a static or rotationally fixed manner.

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Regarding claim 37 as best understood, YOKOYAMA et al. discloses the actuation systems of the individual integrated mechanical components are fastened to the housing connected to the primary impeller in a static or rotationally fixed manner.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWIN A. YOUNG whose telephone number is (571)272-4781. The examiner can normally be reached on M-TH 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. A. Y./  
Examiner, Art Unit 3655

/CHARLES A. MARMOR/  
Supervisory Patent Examiner, Art  
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